

**ELEVATOR  
LIGHTING**



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## Vandal Resistant LED Lighting



**Armour** *Light*®



### Installation and Operating Manual

- LED Lighting Technology for Lifts
- LED Lights
- Power Supply



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## Introduction

### LED Lighting Technology for Lifts

#### **LONG LIFETIME & LUMEN MAINTENANCE**

LEDs maintain over 70% of their original luminous flux at 50,000 hours — long after conventional outdoor light sources have burned out.

#### **BETTER FOR THE ENVIRONMENT**

Unlike many conventional lighting technologies, LEDs contain no mercury or heavy metals. Not only are LEDs better for the environment during their operational life, the disposal of LEDs will not further pollute our world's landfills with hazardous waste.

#### **LED LIGHT IS DIRECTIONAL**

Conventional light fixtures waste approximately 20% to 50% of the light generated due to the lack of directionality of the light source. LED-based fixtures overcome this handicap by making use of a directional point light source.

#### **LED OPERATIONAL LIFETIME IS NOT AFFECTED BY SHOCK OR VIBRATION DAMAGE**

Shocks and vibration shorten the lifespan of a traditional light bulb.

#### **THE BENEFITS OF OUR LED LIGHTING**

High lumen output

Tremendous energy savings

LED lights are much more resistant to failure from shock or vibration — from both bulb failure and connection failure odium or mercury lamps.

Long Life

No glare or strobe effect

No dust absorption or yellowing

Instant start

#### **ENERGY SAVING LIGHTING**

Save up to 80% on power consumption. Cost effective solutions for new lift car lighting.





## LED Light

### LED Light Specification

TECHNICAL DETAILS FOR THE ANTI-VANDAL LAMPS	
Colour Temperature	6000 with 500K tolerance
Illumination [@1M]	850
Colour Rendering Index	75
Input Voltage	10-30VDC and 12-24VAC, 50/60Hz
Power Consumption	6,8W
Power Factor at max. load	95% or above
Storage Temperature	-20°/65°C
Operating Temperature	-30° - +60°C
Beam angle	45°
Watts	3 x 2W
Colour	Cold White

Vandal Resistant Armoured Glass Lens to Class II  
40mm Adjustable Back Fixing

### **COLLAR**

Available in Stainless Steel, Gold or White finish  
Front screw-on ring 100mm diameter

### LED Light Installation

1. First decide the arrangement of the lights in the lift car ceiling; generally this will be between 4 and 6 lights depending on the size of the car.

2. Mark the position of the lights ensuring there is no obstruction preventing the light fitting flush to the car ceiling. Cut the holes- requirement of 56mm - 60mm cut out.



Fig 2.



3. Remove the fixing bracket from the main body of the light as shown in Fig 3.



Fig 3.

4. Pass the main body of the light through the hole in the ceiling as shown in Fig 4.



Fig 4.

5. Re-fit the fixing bracket to the appropriate slot to suit the thickness of the material of the lift car ceiling as shown in Fig 5.



Fig 5.

6. Tighten the securing screws and lock-nuts ensuring the light itself is secure as shown in Fig 6.



Fig 6.



## Power Supply

### Power Supply Specification

**Part Number:** XBS1234ASC

**Function:** LED Lighting Power Supply

**Type:** Maintained (12VDC power supply maintained when 240VAC supply is lost, automatic switching to battery voltage)

**Compatible lamps:** LED supplied with this power supply

### **Features:**

Casing: 280 x 250 x 100 Powder coated steel

Supply voltage: 230VAC 50/60 Hz

Maximum output assisted lamps S1-S2 & S3-S4: 6 W

Maximum lamp output power P1-P2, P3-P4, P5-P6 & P7-P8 : 12 W.

Maximum power of the output 12V + 15% permanent: 2.4 W (200mA)

Type of battery: Lead 12VDC 4.5 Ah (type V0) **FIAMM**®

Primary fuse: timed 315mA

Battery: Autonomy 1 hour / time support 24 h

Temperature of use max: + 40 ° C

Included storage: temperature between - 20 ° C and + 40 ° C

*This product contains a battery and should not be stored for more than 6 months without a recharge. For long discharge following a cut of mains supply of long duration, the battery should be replaced. See date of manufacture on label.*

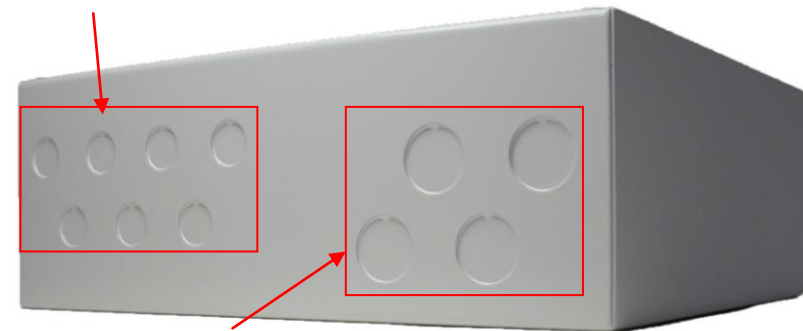
N.B. In accordance with the guidelines 2006/95/EEC "low voltage". 89/336/EEC "COS". & Standard RoHS



### Power Supply Installation and Connection

Knock-outs have been provided in the power supply enclosure, for the incoming supply and the outgoing supply to the LED Lights.

- Use the 16mm knock-out and cable glands provided for passing the cables through the enclosure



- Alternatively use the 20mm knock-outs for connecting directly to trunking, using bush and lock-nut (not provided)

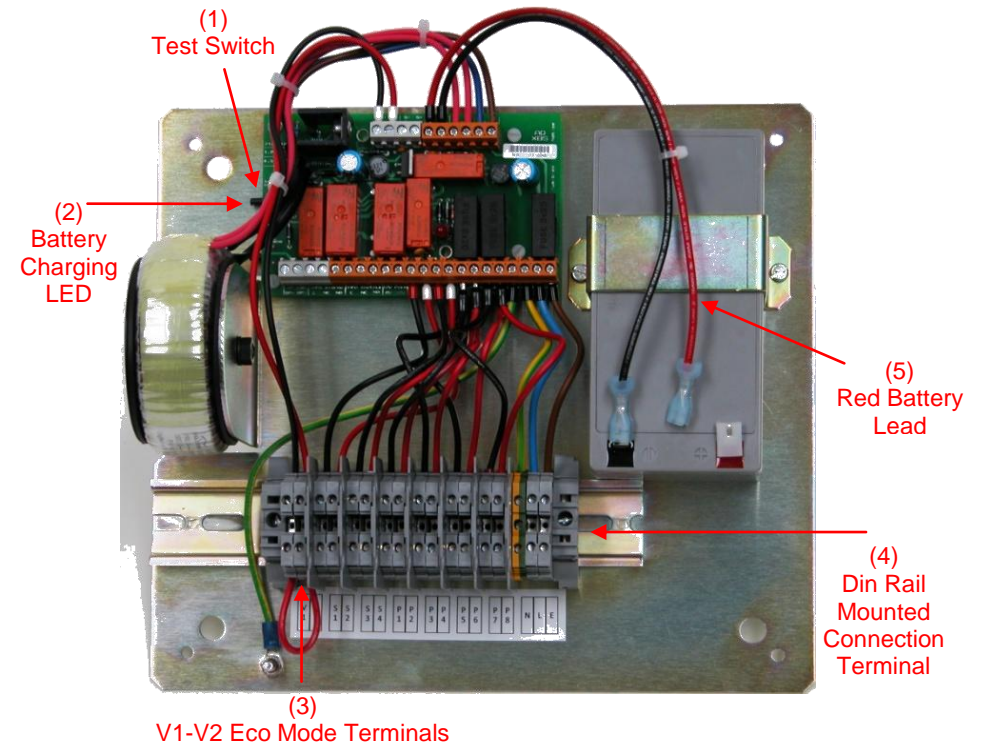
### Connections

**PLEASE SEE DIAGRAM ON PAGE 9 FOR THE FOLLOWING INSTRUCTIONS**

***The power of your installation must be turned off prior to connection of the product***

- Open the housing to access the electronic connection terminals (5)
- Use the connection plan on the inside lid.
- Up to 6 LED Lights can be connected to the power supply. 2 LED Lights will provide emergency back-up for a 4 hour duration.
- Connect the incoming main Supply voltage: 230VAC 50/60 Hz ***The mains power must be turned off prior to connection of the LED Lights***
- The terminals for the LED Lights are marked P1-P8 and S1-S4.
- Up to 4 LED lights can be connected to terminals P1-P8. Terminals P1-P8 are for the **none maintained** LED Lights. If using only 4 LED Lights in total, only 2 LED Lights should be connected to these terminals.
- Terminals S1-S4 are for the maintained LED Lights. 2 Lights **should always be connected** to these terminals. These LED Lights are operating both during normal operation and emergency lights in the event of power failure.
- Terminals V1 and V2 (3) are the Eco Mode Terminals. All of the LED Lights can be switched off in the absence of occupants in the lift car. This can be by either a PIR or any other NO VOLTAGE contact means. (Only remove the link on V1 and V2 on the power supply if this function is being used)

### Power Supply Diagram





### Commissioning and Tests

- Once the wiring has been completed, connect the RED battery terminal **(5)**.
- Switch on the mains voltage supply. Check the battery charging LED **(2)** is illuminated.
- Press and hold the test switch **(1)**. The LED Lights will switch off for a short while and the emergency LED Light will illuminate and will stay on for as long as the button is held on.
- Release the button and the all the LED Lights will illuminate for normal operation.
- Replace the power supply lid.

### Battery

This product contains a battery; it should not be stored for more than 6 months without the recharge.

*For long discharge following a cut of main supply of long duration, the battery should be replaced to ensure correct emergency light duration. See date of manufacture on label.*



## Notes